

CLAIMS:

1. An apparatus (10) for packaging an energy storage capacitor (12) adapted for use with an electronic instrument, the energy storage capacitor (12) having a wound core (14), the wound core (14) adapted for electrical connection to capacitor interface electronics (18) associated with the electronic instrument, the apparatus (10) comprising:

an interior housing surface (22) having a first region (26) and a second region (28), the first region (26) sized to receive the wound core (14) and a potting material (38), and having a cavity defined by a side surface, a closed first end (32), and an at least partially open second end (34), the second region (28) sized to receive the capacitor interface electronics (18); and

an exterior housing surface (24) arrangeable to at least in part surround the interior housing surface (22),

wherein when the wound core (14) is disposed in the first region (26), the wound core (14) is arranged in such a manner that a void (36) for receiving the potting material (38) is positioned between the wound core (14) and the side surface, and a conductive path (16) adapted to electrically connect the wound core (14) and the capacitor interface electronics (18) is arrangeable between the wound core (14) and the second region (28).

2. The apparatus according to claim 1, further comprising:

a wound core (14) disposed in the first region (26), arranged in such a manner that a void (36) for receiving the potting material (38) is positioned between the wound core (14) and the side surface; and

a potting material (38) substantially filling the void (36).

3. The apparatus according to claim 2, wherein the potting material (38) comprises one of oil and epoxy.

4. The apparatus according to claim 1, wherein the interior and exterior housing surfaces (22, 24) comprise a molded plastic housing.

5. The apparatus according to claim 1, wherein the interior and exterior housing surfaces (22, 24) comprise a plurality of interconnected parts.

6. The apparatus according to claim 1, wherein the capacitor interface electronics (18) comprise a circuit board.

7. The apparatus according to claim 1, wherein the electronic instrument comprises an external defibrillator.

8. The apparatus according to claim 1, wherein the side surface comprises one of an oval surface, a circular surface and a box-like surface.

9. A method (500) for packaging an energy storage capacitor (12), the energy storage capacitor (12) having a wound core (14) adapted for communication with capacitor interface electronics (18) associated with an electronic instrument, the method comprising:
providing an interior housing surface (22) having a first region (26) and a second region (28), the first region (26) having a cavity defined by a side surface, a closed first end (32), and an at least partially open second end (34), the second region (28) sized to receive the capacitor interface electronics (18);

arranging the wound core (14) in the first region (26) in such a manner that a void (36) for receiving the potting material (38) is positioned between the wound core (14) and the side surface, and the wound core (14) is positioned for communication with the capacitor interface electronics (18), when the capacitor interface electronics (18) are disposed in the second region (28); and

depositing the potting material (38) into the void (36).

10. The method according to claim 9, further comprising:
disposing the capacitor interface electronics (18) in the second region (28); and
establishing electrical communication between the wound core (14) and the capacitor interface electronics (18).

11. The method according to claim 9, wherein the capacitor interface electronics (18) comprise a circuit board.

12. The method according to claim 9, wherein the potting material (38) comprises one of oil and epoxy.

13. The method according to claim 9, wherein the interior housing surface (22) comprises a molded plastic housing.

14. The method according to claim 9, wherein the interior housing surface (22) comprises a plurality of interconnected plastic parts.

15. The method according to claim 9, wherein the electronic instrument comprises an external defibrillator.

16. The method according to claim 9, wherein the side surface comprises one of an oval surface, a circular surface and a box-like surface.

17. An electronic instrument, comprising:
a housing (20) comprising:
a first interior region (26) and a second interior region (28), the first interior region (26) defining a first cavity and having a configuration defined by a side surface, a closed first end (32) and at least partially open second end (34), the second interior region (28) defining a second cavity;
a wound capacitor core (14) arranged in the first interior region (26) in such a manner that a void (36) is positioned between the wound capacitor core (14) and the side surface;
means for conductively connecting (16) the wound capacitor core (14) and the second interior region (28);
a potting material (38) disposed in the void (36); and
a capacitor interface (18) disposed in the second interior region (28), the capacitor interface (18) in communication with the wound capacitor core (14) via the means for conductively connecting (16) the wound capacitor core (14) and the second interior region (28).

18. The electronic instrument according to claim 17, wherein the electronic instrument comprises an external defibrillator.

19. An electronic device, comprising:
a housing (20) having a first interior region (26) and a second interior region (28), the second interior region (28) sized to receive an electronic interface (18);
a wound capacitor core (14) adapted for electrical communication with the second interior region (28); and
a capacitor potting material (38) disposed in contact with the first interior region (26) and the wound capacitor core (14).

20. The electronic device according to claim 19, wherein the wound capacitor core (14) is shaped substantially similar to and smaller than said first interior region.